

Title (en)

SYSTEM AND PROGRAM FOR PROVIDING DISTANCE AND ORIENTATION FEEDBACK WHILE NAVIGATING IN 3D

Title (de)

SYSTEM UND PROGRAMM ZUR BEREITSTELLUNG VON ENTFERNUNGS- UND AUSRICHTUNGSRÜCKMELDUNG BEI DER NAVIGATION IN 3D

Title (fr)

SYSTÈME ET PROGRAMME POUR FOURNIR UN RETOUR D'ORIENTATION ET DE DISTANCE AU COURS D'UNE NAVIGATION EN 3D

Publication

**EP 4233707 A3 20231011 (EN)**

Application

**EP 23182061 A 20150701**

Priority

- US 201462020258 P 20140702
- EP 15814744 A 20150701
- US 2015038787 W 20150701

Abstract (en)

A system for navigating to a target within a patient, comprising: an extended working channel or locatable guide defining a lumen configured to receive a tool for delivering therapeutic medication to a target within the patient; a display device; and a computing device including a processor and a memory storing instructions which, when executed by the processor, cause the computing device to determine a probability treatment zone which indicates a maximum probable distribution of therapeutic medication distributed by the tool; display, on the display device, the probability treatment zone depicted as a three-dimensional volumetric shape overlaid on an image depicting the target; and display, on the display device, the target at least partially encompassed by the volumetric shape and provide visual feedback as to whether or not a portion of the target encompassed by the probability treatment zone is greater than a threshold portion.

IPC 8 full level

**A61B 5/06** (2006.01); **A61B 34/20** (2016.01); **A61B 1/267** (2006.01); **A61B 10/04** (2006.01); **A61B 34/10** (2016.01)

CPC (source: EP US)

**A61B 5/062** (2013.01 - EP US); **A61B 6/032** (2013.01 - US); **A61B 34/20** (2016.02 - EP US); **A61B 1/2676** (2013.01 - EP US);  
**A61B 10/04** (2013.01 - EP US); **A61B 2017/00809** (2013.01 - EP US); **A61B 2034/102** (2016.02 - EP US); **A61B 2034/105** (2016.02 - EP US);  
**A61B 2034/2051** (2016.02 - EP US)

Citation (search report)

- [A] EP 1421913 A1 20040526 - SURGICAL NAVIGATION TECH [US]
- [A] EP 1980201 A2 20081015 - BRAINLAB AG [DE]
- [A] US 2009099544 A1 20090416 - MUNROW MICHAEL [US], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**US 11382573 B2 20220712; US 2016000520 A1 20160107;** AU 2015284085 A1 20170105; AU 2015284085 B2 20190718;  
CA 2953133 A1 20160107; CN 106659374 A 20170510; CN 106659374 B 20210402; EP 3164051 A1 20170510; EP 3164051 A4 20180314;  
EP 3164051 B1 20230830; EP 4233707 A2 20230830; EP 4233707 A3 20231011; JP 2017528175 A 20170928; JP 6604977 B2 20191113;  
US 11974865 B2 20240507; US 2022338820 A1 20221027; WO 2016004177 A1 20160107

DOCDB simple family (application)

**US 201514790107 A 20150702;** AU 2015284085 A 20150701; CA 2953133 A 20150701; CN 201580035783 A 20150701;  
EP 15814744 A 20150701; EP 23182061 A 20150701; JP 2016575426 A 20150701; US 2015038787 W 20150701;  
US 202217862439 A 20220712